

Channel Selection

Best Practices

1. Avoid high utilization
2. Avoid adjacent-channel interference
3. Avoid co-channel interference

Steps

1. Stand near the access point
2. Select **Physical Mode**, and select the AP radio
3. Note the **Recommended Channel**
4. Configure the AP with the new channel
5. Move to the next AP, repeat (if applicable)

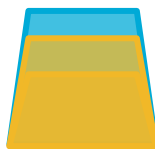
Interference Coloring Rules

Blue Current selection

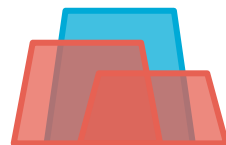
Yellow Co-channel interference (okay)

Red Adjacent-channel interference (bad)

Co-Channel



Adjacent-channel



Coverage and Signal Strength

Rules

- +3 db: double the signal
- -3 db: half the signal

Signal Strength Guidelines

-65 dBm	Streaming video, voice over IP
-70 dBm	Email, web browsing
-80 dBm	Minimum functionality

Utilization Colors

Blue Less than 10 percent

Green 20-30 percent

Yellow 40-50 percent

Red 50 percent or more

Utilization indicates how often the channel is in use.

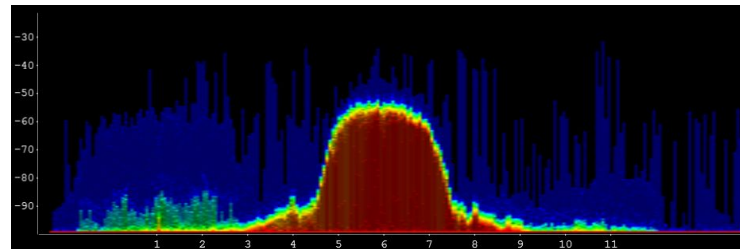
Identify Non-Wi-Fi Interference

Steps

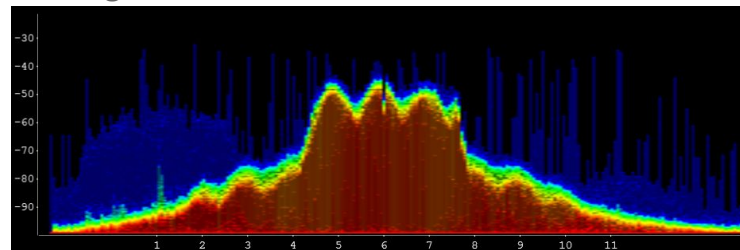
1. Find nearby wireless devices
2. Unplug the suspected interferer
3. Click **File > Clear Data**
4. Check for changes in the 2.4 GHz graph
5. Repeat until the interference signature disappears

Identify Non-Wi-Fi Interference

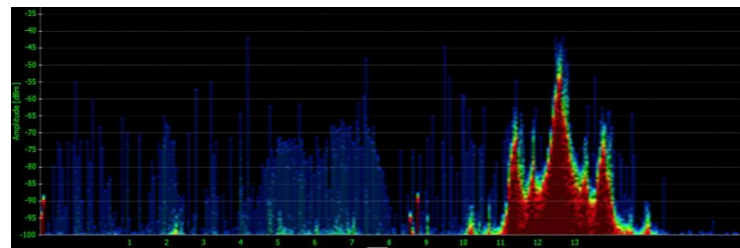
802.11b Wi-Fi



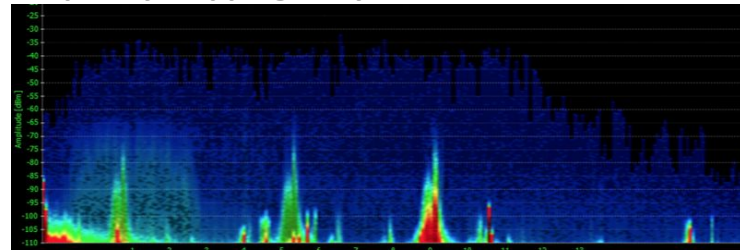
802.11g Wi-Fi



Wireless Video Camera



Frequency-Hopping Baby Monitor



Microwave Oven

